CLAIMS

1. An engine idle stop control system for a vehicle, comprising:

an engine(1),

a motor/generator(2) connected to the engine(1),

an automatic transmission(3) which transmits the rotation of the engine(1) to a drive wheel,

a sensor(18) which detects a vehicle stationary state,

a sensor(15) which detects an accelerator pedal depression amount, and

a microprocessor(10) which is programmed to:

stop the engine(1) according to conditions when the vehicle has been stationary,

restart the engine(1) by starting the motor/generator(2) when a request to restart the engine(1) which has stopped, is determined,

control absorption of torque by the motor/generator(2) so that the starting torque according to the accelerator pedal depression after restart, is effectively the same torque for starting from the engine stop state as for starting from the engine idle rotation state.

2. An engine idle stop control system for a vehicle as defined in Claim 1, wherein:

the torque absorbed by the motor/generator(2) is set to correspond to the engine torque produced according to the difference between the real air volume aspirated by the engine(1) when the vehicle starts from the engine stop

state, and the real air volume aspirated by the engine when the vehicle starts from the engine idle state.

3. An engine idle stop control system for a vehicle as defined in Claim 2, wherein:

the real air volume absorbed by the engine(1) according to the accelerator pedal depression amount when the vehicle starts from the engine stop state is calculated by smoothing the initial value of an air volume equivalent signal, calculated when the throttle is fully open, according to the time until the accelerator is depressed after the engine starts depending on an air flow meter output and the response delay of an intake air system.

4. An engine idle stop control system for a vehicle as defined in Claim 2, wherein:

the real air volume aspirated by the engine(1) according to the accelerator pedal depression amount when the vehicle starts from the engine idle rotation state is calculated by smoothing the initial value of an air volume equivalent signal, calculated when the throttle is closed, according to the time depending on the air flow meter output and the response delay of the intake air system.

5. An engine idle stop control system for a vehicle as defined in Claim 2, wherein:

a fuel injection amount is controlled according to the real air volume aspirated by the engine(1).

6. An engine idle stop control system for a vehicle as defined in Claim 2, wherein:

the motor/generator(2) shifts to absorption torque control by the generator when the motor torque for starting the engine becomes smaller than the absorbed engine torque corresponding to the difference of the aforesaid two real air volumes.

7. An engine idle stop control system for a vehicle as defined in Claim 6, wherein:

the absorption torque control of the motor/generator(2) continues until complete combustion of the engine(1) is determined.

8. An engine idle stop control system for a vehicle, comprising:

an engine(1),

a motor/generator(2) connected to the engine(1),

an automatic transmission(3) which transmits the rotation of the engine(1) to a drive wheel,

means(18) for detecting a vehicle stationary state,

means(15) for detecting an accelerator pedal depression amount,

means(10) for stopping the engine(1) according to conditions when the vehicle has been stationary,

means(10) for restarting the engine by starting the motor/generator(2) when a request to restart the engine which has stopped, is determined, and

means(10) for controlling to make the motor/generator(2) absorb engine torque so that the starting torque according to the accelerator pedal

depression after restart, is effectively the same torque for starting from the engine stop state as for starting from the engine idle rotation state.